

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/38636

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : GOIN 1/10

US CL : 73/863.71,864.63,864.67

According to International Patent Classification (IPO or to both national classification and IPC)

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 73/863.71,864.63,864.67, 863.31, 863.52, 864.65,864.65

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,600,075 A (PETERSON) 04 February 1997 (04.02. 1997), fig.1 and col. 3, lines 18 et seq.	1-4
X	US 5,361,643 A (BOYDE ET AL) 08 November 1994 (08. 11. 1994), Fig. 1.	1-4
X	US 4,037,477 A (NISKIN) 26 July 1977 (26.07. 1977), figs. 1-25.	1-4 and 6-18
X	US 3,017,772 (WRIGHT) 23 January 1962 (23.01. 1962), Fig.1 .	1-5
X,P	US 2004/0123679 A1 (COLEMAN ET AL) 01 July 2004 (01.07.2004), Figs. 1-12.	1-18
X,P	US 2004/0099068 A1 (WELKER) 27 May 2004 (27.05.2004), Figs. 1-3.	1-5

**D** Further documents are listed in the continuation of Box C. ☐ See patent family annex.

Special categories of cited document:		
"A" document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the applicant's disclosure but tied to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means		
"T" document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search

16 August 2005 (16.08.2005)

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JULY 2005

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